

BAB 5

KESIMPULAN DAN SARAN

5.1 Kesimpulan

1. Senyawa 3,3'-dihidroksidibenzalaseton dapat disintesis dengan mereaksikan 3-hidroksibenzaldehida dan aseton dengan perbandingan 2:1 melalui mekanisme kondensasi *Claisen-Schmidt* dengan menggunakan katalis basa NaOH dan pelarut etanol dengan bantuan iradiasi gelombang mikro (daya 160 Watt dan lama waktu iradiasi selama 2 menit) dengan persentase rendemen yang dihasilkan sebesar $56,39 \pm 5,32\%$.
2. Senyawa 3,3'-dihidroksidibenzalaseton dapat disintesis dengan mereaksikan 3-hidroksibenzaldehida dan aseton dengan perbandingan 2:1 melalui mekanisme kondensasi *Claisen-Schmidt* dengan menggunakan katalis basa NaOH dan pelarut etanol secara konvensional dengan lama waktu pengadukan selama 1 jam dengan persentase rendemen yang dihasilkan sebesar $27,42 \pm 2,81\%$.
3. Metode dengan bantuan iradiasi gelombang mikro lebih efisien dibandingkan dengan metode konvensional untuk sintesis senyawa 3,3'-dihidroksidibenzalaseton berdasarkan rendemen hasil sintesis.

5.2 Saran

1. Metode sintesis dapat dikembangkan lebih lanjut dengan menggunakan katalis $\text{Ba}(\text{OH})_2$ untuk meminimalkan terjadinya reaksi Cannizzaro.
2. Penelitian ini dapat dikembangkan lebih lanjut untuk dapat mengetahui aktivitas efek farmakologi senyawa 3,3'-dihidroksidibenzalaseton.

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